

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operat or | Plural s | Time Stamp |
|-------|------|---|--|-------------------|----------|------------------|
| L9 | 36 | (underfill or encapsulant or encapsulat\$3)same(substrate adj board)and clean\$3 | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:00 |
| L10 | 164 | (underfill or encapsulant or encapsulat\$3)and(substrate adj board)and clean\$3 | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:00 |
| L11 | 30 | ((underfill or encapsulant or encapsulat\$3) same (clean\$3 wash\$3 or rins43))and(substrate adj board) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:01 |
| L12 | 12 | ((underfill or encapsulant or encapsulat\$3 or resilient or resistant or resistance)near5 between near5(substrate adj board)) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:05 |
| S2 | 11 | ("5060844" "5784261" "6015722" "6048656" "6177728" "6294271" "6310120" "6333563" "6506869" "6572980" "6586846").PN. | US-PGPU B; USPAT | OR | ON | 2006/10/03 17:50 |

EAST Search History

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| S3 | 10 | S2 and (underfill or filler) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 17:57 |
| S12 | 13 | ((solder or ball) near5 (interconnect or array)) and (underfill near50 filler)and (heat adj sink) and substrate and (interposer or stiffener) and (collar or bracket or support or frame or (rigid adj (metal or ball))) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:43 |
| S13 | 297 | 228/215.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:22 |
| S14 | 488 | 228/178.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:22 |
| S15 | 1089 | 228/180.1.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:22 |

EAST Search History

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| S16 | 978 | 228/180.21.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:22 |
| S17 | 1264 | 228/180.22.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:24 |
| S18 | 118 | 228/244.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:25 |
| S19 | 3878 | S13 or S14 or S15 or S16 or S17 or S18 | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:26 |
| S20 | 62 | S19 and (interposer or stiffener) and (collar or bracket or support or frame or (rigid adj (metal or ball))) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:27 |

EAST Search History

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| S22 | 23 | S19 and underfill and (heat adj sink) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/03 18:44 |
| S26 | 1444 | ((((creep\$3 or fatigue or collapse\$3 or fall\$3 or bend\$3 or buckl\$3) adj resistan\$2)near5(collar or underfill or bracket or encapsulant or encapsulat\$3 or pin or metal)) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 09:45 |
| S27 | 358 | S26 and (particle adj size) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 09:38 |
| S28 | 496 | S26 and (density) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 09:28 |
| S29 | 332 | S26 and (viscosity) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 09:28 |

EAST Search History

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| S30 | 50779 | "228"/\$.ccls. | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 09:43 |
| S31 | 25 | S30 and S26 | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 09:43 |
| S34 | 32 | ((creep\$3 or fatigue or collaps\$3 or fall\$3 or bend\$3 or buckl\$3) near5 resistan\$2)same(collar or underfill or bracket or encapsulant or encapsulat\$3 or pin or metal))same ((solder or ball) near5 (array or interconnect)) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 10:22 |
| S35 | 352652 | "257"/\$.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 10:20 |
| S36 | 17 | S34 and S35 | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 10:21 |

EAST Search History

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| S37 | 934 | S35 and ((collar or underfill or bracket or encapsulant or encapsulat\$3 or pin or metal)near50 (vicosity or density or (particale adj size) or (glass adj transition adj temperature)))and ((solder or ball) near5 (array or interconnect)) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 10:25 |
| S38 | 112 | S35 and (((collar or underfill or bracket or encapsulant or encapsulat\$3 or pin or metal)near50 (vicosity or density or (particale adj size) or (glass adj transition adj temperature)))near50 ((solder or ball) near5 (array or interconnect))) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/05 10:25 |

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|-------|---|--|------------------|---------|------------------|
| L16 | 630 | ((clean\$3 wash\$3 or rins\$3)same(substrate or board)same(prior or before or after)same(apply or applied or deposit\$3) same(underfill or encapsulant or encapsulat\$3)) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:21 |
| L17 | 20 | ((clean\$3 wash\$3 or rins\$3)with(substrate or board)with(prior or before or after)with(apply or applied or deposit\$3) with(underfill or encapsulant or encapsulat\$3)) | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:18 |
| L18 | 40586 | "228"/\$.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:21 |
| L20 | 24 | 16 and 18 | US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB | OR | ON | 2006/10/06 14:22 |